

IN THE CLAIMS:

Please cancel claims 1-7 without prejudice or disclaimer.

1-7. (Cancelled without prejudice or disclaimer).

8-21. (Withdrawn from consideration in this application).

22. A light valve for use in high contrast reflective microdisplays, comprising:

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- a twisted nematic mode reflective liquid crystal cell;
- a color filter positioned to accept non-polarized light incident to the light valve;
- a linear polarizer positioned between said color filter and said liquid crystal cell;
- an analyzer positioned in the path of the light reflected by said liquid crystal cell;
- and
- a retarder positioned between said liquid crystal cell and said analyzer in the path of the light reflected by said liquid crystal cell;
- wherein light incident to the light valve is generally off-axis to said liquid crystal cell;
- whereby said retarder functions to decrease ellipticity and alter the polarization axis of light reflected by said liquid crystal cell.

23. The light valve of claim 22 wherein said liquid crystal cell is an LCoS cell.

24. The light valve of claim 22 wherein light incident to the light valve is between 10° and 20° off-axis.

25. The light valve of claim 23 wherein light incident to the light valve is 15° off-axis.

26. The light valve of claim 22 wherein said liquid crystal cell has a twist angle ranging from 40° to 65°.

27. The light valve of claim 26 wherein said liquid crystal cell is in twisted nematic mode.

28. The light valve of claim 22 wherein the horizontal axis of said polarizer and the horizontal axis of said analyzer are 90° apart.

29. The light valve of claim 22 wherein said retarder has a retardation value ranging from 430 nanometers to 630 nanometers and a retardation angle ranging from 87.6° to 90.2° in a red band of light.

30. The light valve of claim 29 wherein said retarder has a retardation value centered at 530 nanometers and a retardation angle centered at 89° in a red band of light.

31. The light valve of claim 22 wherein said retarder has a retardation value ranging from 350 nanometers to 550 nanometers and a retardation angle ranging from 87.5° to 90.5° in a green band of light.

32. The light valve of claim 31 wherein said retarder has a retardation value centered at 460 nanometers and a retardation angle centered at 89° in a green band of light.

33. The light valve of claim 22 wherein said retarder has a retardation value ranging from 280 nanometers to 460 nanometers and a retardation angle ranging from 87.7° to 90.3° in a blue band of light.

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34. The light valve of claim 33 wherein said first retarder has a retardation value centered at 370 nanometers and a retardation angle centered at 89° in a blue band of light.

35. (Withdrawn from consideration in this application).

Please add the following new claims.

36. (New) A liquid crystal display system comprising:

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a reflective liquid crystal on silicon type cell with a twisted nematic mode;
a color filter positioned to accept non-polarized light incident to the liquid crystal cell;

a linear polarizer positioned between the color filter and the liquid crystal cell;
an analyzer positioned between the color filter and the liquid crystal cell;
and a retarder positioned between the liquid crystal cell and the analyzer;
the liquid crystal display system being adapted for operation with incident light off-axis relative to the liquid crystal cell, and wherein polarization and ellipticity of light reflected by the liquid crystal cell is different than the polarization and ellipticity of the incident light.

37. (New) The liquid crystal display system of claim 36 wherein the color filter and linear polarizer are positioned relative to the liquid crystal cell to receive incident light in a range of 10-15 degrees from an axis of the liquid crystal cell.

38. (New) The liquid crystal display system of claim 36 wherein a horizontal axis of the linear polarizer and a horizontal axis of the analyzer are 90 degrees apart.

39. (New) The liquid crystal display system of claim 36 wherein the liquid crystal cell is in twisted nematic mode.

40. (New) The liquid crystal display system of claim 36 wherein the liquid crystal cell has a twist angle in twisted nematic mode in a range of 40 to 65 degrees.
